



Hospitable Climates Energy Report

Example Hotel

Hospitable Climates Number:	23223
Contact Name:	A.N.Other
Address:	1 The Road
Town:	Hadleigh
County:	Suffolk
Postal Code:	IP7 1XX
Telephone:	01473 111111
Fax:	
Email:	enquires@solstice.eu.com
Website address:	
Business Type:	Private
Franchise:	

Introduction

Thank you for entering your details. Once registered with HEAT Online your information is remembered using your unique reference number and password. Please keep these details in a safe place as you will need them to access your report again and to enter next year's information. You can return to this year's HEAT report at any time to print it out or to download it from the Hospitable Climates website.

Following an analysis of your details, HEAT Online has prepared:

- information regarding energy use in your premises
- a graphical representation of how your energy performance rates in relation to the rest of the industry contained within the HEAT database (i.e. how competitive you are)
- some specific targeted advice for your energy needs
- an analysis of your premises compared to a good practice benchmark.

We hope that this information is useful in your ongoing challenge of catching up with the best. By implementing just a few of these examples you will be able to save both energy and money and enhance the competitiveness of your business.

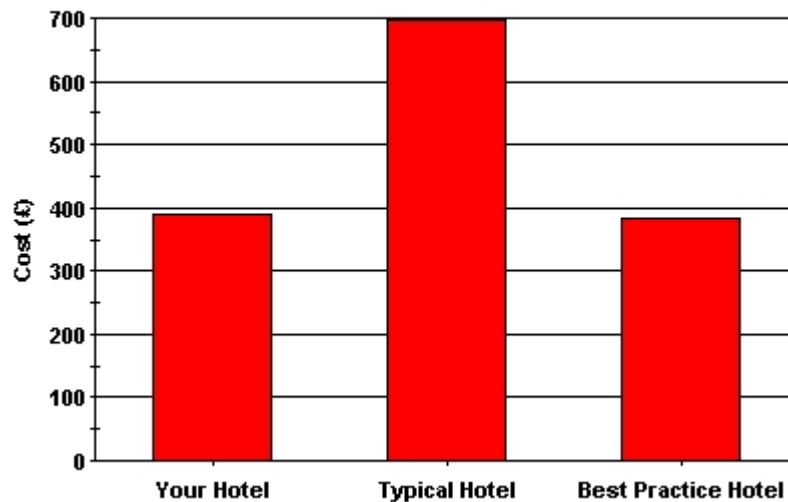
Your business has been classified as a **Medium Hotel, with air-conditioning, but without a swimming pool**. It has then been compared with all other hospitality businesses within the Energy Measures database that match this description. This is in order to derive an industry benchmark for us to compare it against.

Your Performance

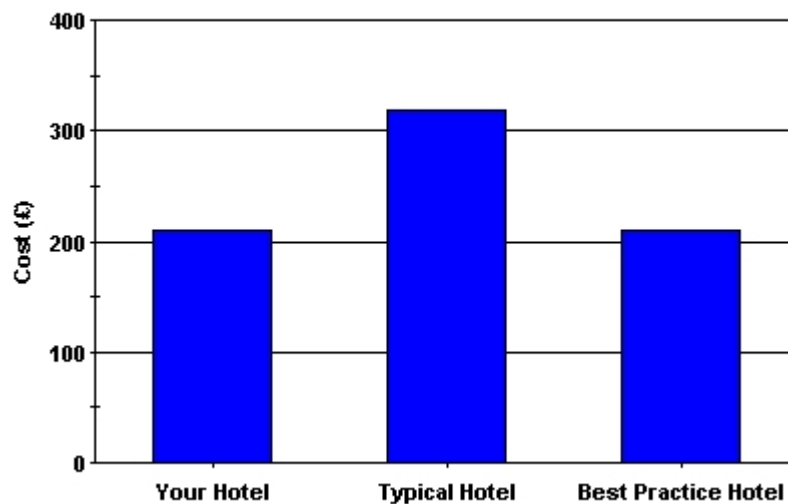
The following graphs provide an indication of your organisation's performance when it comes to energy use. HEAT Online compares you with all other hotels entered into the database, taking into consideration your hotel size and the types of facilities you have. In this way it helps to provide an accurate indicator of how wasteful (or efficient) you are being with your energy and the money that you use to buy it.

The graphs are arranged so that your details are given first, then compared with the rest of the industry entered on the database, and then compared with the best practice hotels and the very best hotel that we have entered its details into Heat Online. So how do you rate?

Annual Cost Per Bedroom of Electricity Use



Annual Cost Per Bedroom of Fossil-Fuel Use



Annual cost of electricity per bedroom:	£390.00
Annual cost of fossil fuel per bedroom:	£210.00
Typical cost of electricity per bedroom:	£696.00
Good practice cost of electricity per bedroom:	£382.80
Typical cost of fossil fuel per bedroom:	£319.00
Good practice cost of fossil fuel per bedroom:	£210.25

You are currently using, in your category, about:

- 44% less electrical energy than the average hotel
- 2% more electrical energy than a well performing hotel
- 34% less fossil fuel (oil and gas) energy than the average hotel
- 0% less fossil fuel (oil and gas) energy than a well performing hotel.

All of the benchmark values given are average figures and are limited to the details that we hold on the database - they do not represent the 'best' that can be achieved. Even those hotels whose performance is rated as 'good' can still make further improvements and savings.

A note on accuracy

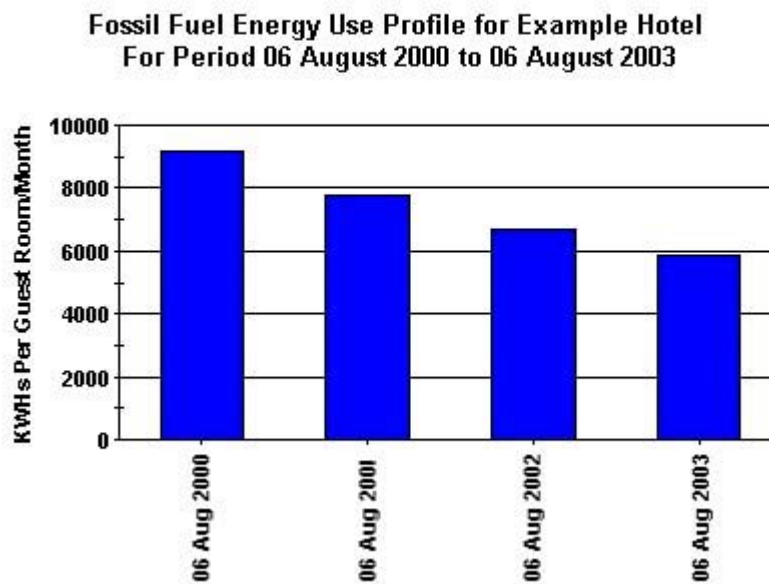
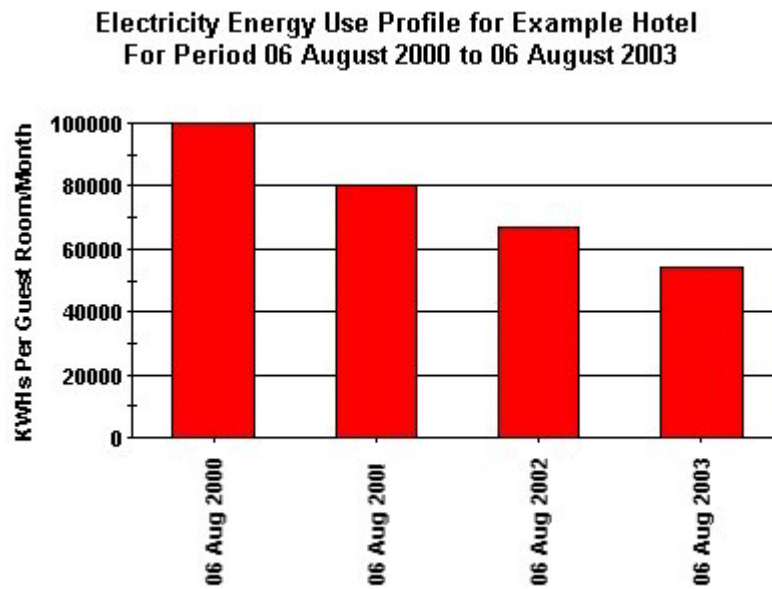
The graphs are based on measured consumption in 'typical' hotels with normal facilities for their type. If your hotel differs greatly from the norm, patterns of consumption will be affected. In order to give you as accurate an assessment as possible, HEAT Online takes into consideration certain factors such as where your hotel is located (based on postcode), occupancy and whether you have services such as air-conditioning or a swimming pool etc.

However, please note that although every care is taken to provide accurate information, the results will be dependent on a number of factors (including the quality of input data) and can therefore only act as an approximation of your energy use. If you find large variations of your energy performance when comparing to the industry benchmarks, it would be advisable to seek further advice through the Government's Site Specific Advice Scheme or by ringing the environment and energy help-line on 0800 585 794.

If your business is not a UK hotel these benchmarks will not be relevant.

Your Performance Over Time

Currently the system holds 4 sets of energy data for your hotel, the graph below shows these and your energy use over time.



Recommendations

Heat Online has analysed your specific situation and has generated some targeted advice and information based on your facilities. By following some of the recommendations given below you will be contributing to a more efficiently run business, an increased operating profit and a more hospitable climate. You will also more readily be able to offer your guests a warm welcome in a changing environment.

Improving the energy efficiency of your hotel is important, for a number of reasons:-

- Reduces fuel bills and makes your business more profitable and competitive
- Energy efficient conditions normally increase comfort levels for your guests, thus encouraging them to revisit
- Reducing energy usage reduces carbon dioxide emissions and other air pollutants, thus improving environmental conditions, for the benefit of all.

Implementing the following actions, in your establishment, will ensure that you have the basic structure in place, to maximise the benefits to be derived from the energy management process:-

- Draw up a simple, yet concise, energy policy, to be applied in your organisation - setting out your objectives and the means by which you intend to achieve them
- Ensure "energy" is a regular agenda item in your routine operational meetings
- Monitor your use of energy, regularly, and compare this usage with industry benchmarks. Set objective targets.
- Make someone responsible for energy, in your organisation - maybe yourself!
- Undertake a simple energy audit, using a check-list, to identify areas where savings opportunities can be identified
- Provide a small energy saving investment budget to fund low cost energy saving measures

Maintenance

Regular servicing and maintenance is vital to the energy efficient operation of heating, ventilation or cooling equipment. Not only will maintenance ensure the units are performing efficiently and set temperatures are correct, but also minimise the risk of expensive and disruptive breakdowns. Comfort conditions will also be ensured for the benefit of your guests.

Servicing should be carried out according to the manufacturer's specification, but all items should be serviced at least annually, some oil fired boilers requiring two services each year.

Insulation

Heat losses from your hotel can be reduced by improving the insulation properties of the building.

Cavity Wall Insulation

Heat losses through cavity walls can be reduced by about two-thirds by filling the cavity with insulation. This can be either blown mineral wool, polystyrene beads or a foamed insulation. This work is inexpensive and causes little disruption.

Windows

Where windows are to be replaced then double glazed units should be used, as the additional cost is marginal. The benefits to be derived include reduced heat losses, reduced condensation, improved thermal comfort and noise reduction.

Lighting

Effective lighting is essential to provide a well lit and safe working environment for the hotel staff, but is also vital to provide an aesthetically pleasing environment for the benefit of your hotel guests. Over 20% of your total energy cost will be expended on lighting, so energy efficient lighting can provide a substantial saving opportunity.

Lighting Control

Switching lights off when ambient light levels are sufficient or rooms are unoccupied can reduce lighting energy consumption significantly. Automatic devices are available that make switching off easier. These automatic controls include:

- Time control can switch lights on and off at pre-set times, each day
- Occupancy sensors can switch on lights when movement is detected and switch them off after a pre-set period of inactivity.
- Photocell controls can switch or dim lights when there is adequate daylight available.

The above lighting controls can also be used to alter the mood or ambience of the lighting, to suite different times of day or event, etc.

Heating

Boilers

Boilers that are 10 to 15+ years old will usually be operating at an efficiency of 60% to 70%. This low figure is partly due to time based wear and tear, but also reflects the design technology of the. Modern "high efficiency" boilers, by comparison, will operate at an efficiency of 75% to 85%, whereas the modern 'condensing' gas boiler is capable of an efficiency of 90%+.

- The use of thermostatic radiator valves (TRV's) on individual radiators, in guest's bedrooms, allows room temperatures to be selected, by the guest, and for a lower "set-back" temperature to be set, by the hotel's staff, when the room is unoccupied.
- Occupancy linked controls - these enable guest's bedrooms to be isolated or heated to a "set-back" temperature, automatically, as guests enter or leave their rooms, or when they check in at reception.

Space heating consumes about 50% of the total energy of a hotel, and contributes about 30% of the total energy cost. Energy efficiency will be affected by the type of boiler and system employed, the level and sophistication of the control system used, and the general standard of maintenance of all equipment.

In a larger hotel, consider installing a Building Energy Management System (BEMS). This system uses microprocessor technology to incorporate multi-function control ability in a building, giving the operator considerable flexibility in the use of heating, cooling and ventilation systems, with energy use minimised. BEMS are now available to install, cost effectively, in relatively small properties. Their control ability can often be extended to cover other items, such as lighting, security, fire alarm, etc.

Air-Conditioning

To minimise the electricity consumption of your air-conditioning or comfort cooling system the following simple steps should be taken:

- Ensure that the heating and cooling system cannot be operated simultaneously, in the same area. Separate systems should, preferably, be linked together through their controls to prevent both systems being run together. If this is not possible then manual diligence, through staff awareness, must be initiated.
- When outside air temperatures are low (below say 12°C), then the "free cooling" effect of this air should be used, through the ventilation system, to save the use of electrically driven air-conditioning equipment. Opening windows or doors, to allow cool air ingress can be useful if the ventilation system cannot cope. "Free cooling" should be available throughout most of the winter, autumn and spring months.

Ventilation

Hot Water

Hot water temperature should be limited to 60°C, this ensures it is hot enough to combat the risk of Legionnaire's Disease, but not too hot to be energy wasteful and to produce a danger of scalding. Hot water should be time and temperature controlled separately from the central heating system.

All pipework should be well insulated, as well as storage cylinders - which should, preferably, be pre-insulated.

Local "instant" hot water heaters should be considered if very long pipe runs are currently needed; this will reduce heat loss in the long pipework as well as reduce water usage, by eliminating cold draw-off.

Catering Equipment

To minimise energy use in your kitchen the following key points should be observed:-

- Establish the minimum heat-up times for appliances, and make sure staff observe them. Do not switch on appliances until required, and switch them off when they are no longer in use.

Most appliances require a maximum of 10 to 15 minutes to reach operating temperature.

- Ensure dishwashers are only run when full - running a partly loaded machine uses as much energy as a fully loaded one.
- Try and ensure refrigerators and freezers are located outside of the hot cooking areas; a cooler, well ventilated place will reduce electricity consumption.
- Do not leave refrigerator and freezer doors left wedged open, not only will this increase energy use but will risk food spoilage if storage temperatures are not maintained.

Cellar cooling will significantly contribute to your total energy bill. To ensure cellar cooling equipment operates at minimum energy input the following simple measures should be taken:-

- Check temperatures are not set too low
- Keep cellar doors closed - do not leave propped open
- Ensure no heat producing equipment - such as ice maker, freezer, in-line beer cooler - is located in the cooled cellar.

General

Improving the energy efficiency of your hotel is important, for a number of reasons:-

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Further advice and information can be obtained by following the links below or ringing the free environment and energy helpline number 0800 585 794.